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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,166	10/23/2003	Robyn Lee Focazio	AUS920030688US1	1938
45371	7590	09/04/2007	EXAMINER	
IBM CORPORATION (RUS) c/o Rudolf O Siegesmund Gordon & Rees, LLP 2100 Ross Avenue Suite 2600 DALLAS, TX 75201			LIN, SHEW FEN	
		ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/692,166	FOCAZIO ET AL.	
	Examiner	Art Unit	
	Shew-Fen Lin	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 June 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-39 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- a. This action is responsive to amendments and remarks filed on 6/12/2007.
- b. Claims 1-39 are pending. Claims 1, 10, 17, 25, and 32 are independent claims.

Withdrawal of Rejections/Objections

In view of the amendments, submitted on 6/12/2007, Examiner hereby withdraws the rejections that were given in the previous Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (US Patent 5,418,950, hereinafter Li).

As to claim 1, Li discloses a computer implemented process for creating a query for a database located in a memory (column 3, lines 5-36), wherein the computer implemented process causes a computer, responsive to a user entry of a plurality of fields, a filter, and a sort criteria (Figure 2b, column 3, lines 14-24), to automatically identify a set of necessary tables in the database (Figure 2b, item 240, column 9, lines 52-55, column 10, lines 40-51) and to generate a

query having a clause linked to the set of necessary tables (From Clause with tables determined based on chosen columns, Figure 8, column 3, lines 31-33, column 9, lines 52-55) so that the query can only access the set of necessary tables (tables specified in From Clause, column 9, lines 52-55, column 12, lines 63-65, column 13, lines 14-23).

As to claim 2, Li discloses determining that a SQL template has a FROM clause placeholder (Figure 2b, item 240) and determining that a FROM clause table has been previously specified in the SQL template (Figure 2b, item 240); responsive to the determination that the SQL template has the FROM clause placeholder and that the FROM clause table has not been previously specified in the SQL template, generating a FROM clause for the table (Figure 8, column 9, lines 66-67, column 11, lines 51-67, column 12, lines 1-2); determining that the SQL template has a JOIN clause placeholder (Figure 2b, item 250, column 2, lines 52-62) and determining that the FROM clause has been added (Figures 2b, 8); and responsive to the determination that the SQL template has the JOIN clause placeholder and that the FROM clause has been added, generating a JOIN clause (Figure 8).

As to claim 3, Li discloses responsive to the determination that the SQL template has the FROM clause placeholder and that the FROM clause table has not been previously specified in the SQL template, adding the FROM clause to a FROM clause string (Figure 8, column 9, lines 26-27); and responsive to the determination that the SQL template has the JOIN clause placeholder and that the FROM clause has not been added, adding the JOIN clause to a JOIN clause string (Figure 8).

As to claim 4, Li discloses generating a (join) WHERE clause (“WHERE clause”, Figure 3a, item 341); adding the (join) WHERE clause to a (join) WHERE clause string (Figure 8); adding an alias to an added aliases list (add alias, Figures 5, 29, column 13, lines 36-41); and adding an optional where clause alias to an optional where clause aliases list (option aliases, Figure 29).

As to claim 5, Li discloses determining that a plurality of parameters are on the added aliases list (Figure 13b, column 21, lines 49-57); and responsive to the determination that the parameters are not on the added aliases list, performing the steps in claim 2 (Figure 13b, column 21, lines 35-57).

As to claim 6, Li discloses generating a SELECT clause (Figure 2b, item 230, Figure 3a); generating a (filter) WHERE clause (Figure 2b, item 250, Figure 3a); and generating an ORDER BY clause (Figures 2b, 8).

As to claim 7, Li discloses responsive to the determination that all of the parameters have been analyzed, determining that an optional where clause alias is on the added aliases list (Figure 13c, item 1378); responsive to the determination that the optional where clause alias is on the added aliases list, generating a (join) WHERE clause for the optional where clause alias (Figure 13c, item 1379, column 21, lines 63-66); and responsive to the determination that the optional

where clause alias is on the added aliases list, adding the (join) WHERE clause to a (join) WHERE clause string (Figure 13c, item 1388).

As to claim 8, Li discloses replacing the FROM clause placeholder in the SQL template with a FROM clause string (Figure 8, column 18, lines 7-8); replacing the JOIN clause placeholder in the SQL template with a JOIN clause string (Figure 8); and adding a (join) WHERE clause string to the (filter) WHERE clauses in the SQL template (Figure 8, column 18, lines 9-10).

As to claim 9, Li discloses accepting a user submission of a field and a filter (fields, condition, column 3, lines 14-24); sending the query to the database (execute action, Figure 14, item 1414, column 22, lines 28-33); and obtaining an output from the database (return query report, Figure 14, item 1416, column 22, lines 28-33).

As to claim 10, Li discloses a computer implemented process for creating a query for a database located in a memory (column 3, lines 5-36), wherein the computer implemented process, responsive to a user entry of a plurality of parameters (Figure 2b, column 3, lines 14-24 automatically identify a set of necessary tables in the database (Figure 2b, item 240, column 10, lines 40-51) and generates a query having a clause linked to the set of necessary tables (From Clause with tables determined based on chosen columns, Figure 8, column 3, lines 31-33, column 9, lines 52-55) so that the query can only access the set of necessary tables (tables specified in From Clause, column 9, lines 52-55, column 12, lines 63-65, column 13, lines 14-

23), the computer implemented process comprising: determining that a plurality of parameters are on the added aliases list (Figure 13b, column 21, lines 49-57); responsive to the determination that the parameters are not on the added aliases list, running a clause generation program (Figure 13b, 13c, column 21, lines 35-57); determining that all of the parameters have been analyzed; responsive to the determination that all of the parameters have been analyzed , determining that an optional where clause alias is on the added aliases list (Figure 13c, item 1378); responsive to the determination that the optional where clause alias is on the added aliases list, generating the (join) WHERE clause for the optional where clause alias (Figure 13c, item 1379, column 21,lines 63-66); and responsive to the determination that the optional where clause alias is on the added aliases list, adding the (join) WHERE clause to the (join) WHERE clause string (Figure 13c, item 1388).

As to claim 11, Li discloses wherein the clause generation program comprises: determining that a SQL template has a FROM clause placeholder (Figure 2b, item 240) and determining that a FROM clause table has been previously specified in the SQL template (Figure 2b, item 240); responsive to the determination that the SQL template has the FROM clause placeholder and that the FROM clause table has not been previously specified in the SQL template, generating a FROM clause for the table (Figure 8, column 9, lines 66-67, column 11, lines 51-67, column 12, lines 1-2); determining that the SQL template has a JOIN clause placeholder (Figure 2b, item 250, column 2, lines 52-62) and determining that the FROM clause has been added (Figures 2b, 8); and responsive to the determination that the SQL template has

the JOIN clause placeholder and that the FROM clause has been added, generating a JOIN clause (Figure 8).

As to claim 12, Li discloses wherein the clause generation program further comprises: responsive to the determination that the SQL template has the FROM clause placeholder and that the FROM clause table has not been previously specified in the SQL template, adding the FROM clause to a FROM clause string (Figure 8, column 9, lines 26-27); and responsive to the determination that the SQL template has the JOIN clause placeholder and that the FROM clause has not been added, adding the JOIN clause to a JOIN clause string (Figure 8).

As to claim 13, Li discloses wherein the clause generation program further comprises: generating a (join) WHERE clause (“WHERE clause”, Figure 3a, item 341); adding the (join) WHERE clause to a (join) WHERE clause string (Figure 8); adding an alias to an added aliases list (add alias, Figures 5, 29, column 13, lines 36-41); and adding an optional where clause alias to an optional where clause aliases list (option aliases, Figure 29).

As to claim 14, Li discloses generating a SELECT clause (Figure 2b, item 230, Figure 3a); generating a (filter) WHERE clause (Figure 2b, item 250, Figure 3a); and generating an ORDER BY clause (Figures 2b, 8).

As to claim 15, Li discloses replacing the FROM clause placeholder in the SQL template with a FROM clause string (Figure 8, column 18, lines 7-8); replacing the JOIN clause

placeholder in the SQL template with a JOIN clause string (Figure 8); and adding the (join) WHERE clause string to a (filter) WHERE clauses in the SQL template (Figure 8, column 18, lines 9-10).

As to claim 16, LI discloses accepting a user submission of a field and a filter (fields, condition, column 3, lines 14-24); sending the query to the database (execute action, Figure 14, item 1414, column 22, lines 28-33); and obtaining an output from the database (return query report, Figure 14, item 1416, column 22, lines 28-33).

As to claim 17, is directed to a computer program product carrying instructions for performing the process of claim 2 and is rejected along the same rationale.

As to claim 18, is directed to a computer program product carrying instructions for performing the process of claim 3 and is rejected along the same rationale.

As to claim 19, is directed to a computer program product carrying instructions for performing the process of claim 4 and is rejected along the same rationale.

As to claim 20, is directed to a computer program product carrying instructions for performing the process of claim 5 and is rejected along the same rationale.

As to claim 21, is directed to a computer program product carrying instructions for performing the process of claim 6 and is rejected along the same rationale.

As to claim 22, is directed to a computer program product carrying instructions for performing the process of claim 7 and is rejected along the same rationale.

As to claim 23, is directed to a computer program product carrying instructions for performing the process of claim 8 and is rejected along the same rationale.

As to claim 24, is directed to a computer program product carrying instructions for performing the process of claim 9 and is rejected along the same rationale.

As to claim 25, is directed to a computer program product carrying instructions for performing the process of claim 10 and is rejected along the same rationale.

As to claim 26, is directed to a computer program product carrying instructions for performing the process of claim 11 and is rejected along the same rationale.

As to claim 27, is directed to a computer program product carrying instructions for performing the process of claim 12 and is rejected along the same rationale.

As to claim 28, is directed to a computer program product carrying instructions for performing the process of claim 13 and is rejected along the same rationale.

As to claim 29, is directed to a computer program product carrying instructions for performing the process of claim 14 and is rejected along the same rationale.

As to claim 30, is directed to a computer program product carrying instructions for performing the process of claim 15 and is rejected along the same rationale.

As to claim 31, is directed to a computer program product carrying instructions for performing the process of claim 16 and is rejected along the same rationale.

As to claim 32, Li discloses a program product operable on a computer, the program product comprising: a computer-readable medium (Figure 1a); wherein the computer readable medium contains instructions to cause a computer, responsive to a user entry of a plurality of

fields, a filter, and a sort criteria (Figure 2b, column 3, lines 14-24), to automatically identify a set of necessary tables in the database and to generate a query having (Figure 2b, item 240, column 10, lines 40-51) and to generate a query having a clause linked to the set of necessary tables (From Clause with tables determined based on chosen columns, Figure 8, column 3, lines 31-33, column 9, lines 52-55) so that the query can only access necessary table in the database (tables specified in From Clause, column 9, lines 52-55, column 12, lines 63-65, column 13, lines 14-23), the instructions comprising: a query program, wherein the query program queries a database using a query (execute action, Figure 14, items 1410-1416, column 22, lines 28-33); a query generation program, wherein the query generation program generates a query having only the necessary joins for the query (Figures 2b, 8, Figure 13a/b/c); and a clause generation program, wherein the clause generation program determines which clauses are necessary in the query (Figure 8, Figures 13a/b/c).

As to claim 33, claim 33 is essentially the same as claim 10 except that it sets forth the claimed invention as a computer program product rather than a method and is rejected under the same rationale.

As to claim 34, claim 34 is essentially the same as claim 14 except that it sets forth the claimed invention as a computer program product rather than a method and is rejected under the same rationale.

As to claim 35, claim 35 is essentially the same as claim 15 except that it sets forth the claimed invention as a computer program product rather than a method and is rejected under the same rationale.

As to claim 36, claim 36 is essentially the same as claim 11 except that it sets forth the claimed invention as a computer program product rather than a method and is rejected under the same rationale.

As to claim 37, claim 37 is essentially the same as claim 12 except that it sets forth the claimed invention as a computer program product rather than a method and is rejected under the same rationale.

As to claim 38, claim 38 is essentially the same as claim 13 except that it sets forth the claimed invention as a computer program product rather than a method and is rejected under the same rationale.

As to claim 39, claim 39 is essentially the same as claim 16 except that it sets forth the claimed invention as a computer program product rather than a method and is rejected under the same rationale.

Response to Amendment and Remarks

Applicant's amendments and remarks have been fully and carefully considered. In response to these amendments, another iteration of claim analysis, based on previously relied on reference(s), and particularly addressing the newly amended limitation, has been made. Refer to the corresponding sections of the claim analysis for details.

Applicant argues that Li discloses a graphical user interface comprises seven panes to be used by a user to create a query. In contrast, applicant creates the query by entering only the fields, at least one filter, and at least one sort criteria.

In response to Applicant's arguments, the Examiner respectfully submits that Li disclose a graphical user interface for user to enter "a plurality of fields, a filter, and a sort criteria" as shown in Fig. 2b and how many panes in the graphical user interface is irrelevant.

Applicant argues that the instant invention has advantages over Li in that the instant invention automatically determines necessary tables based on the initial query (fields, filters, and criteria), rather than having a user select a set of columns from all available columns. The present invention eliminates the need for the user to make the selection of columns by automating the process of identifying the set of necessary tables. The Examiner respectfully disagrees for the following reasons:

First, it is unclear as how it is possible to "eliminates the need for the user to make the selection of columns by automating the process of identifying the set of necessary tables".

Second, the Examiner respectfully submits that the Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). In this case, Li clearly teaches the limitation of "a plurality of fields" (SELECT statement fields, see Fig. 2b).

Furthermore, Li discloses that, First, choosing the columns (fields) for the report, i.e. a plurality of fields. Second, determining the conditions for a row (data record) to be included in the report, i.e. filter. Third, if grouping is necessary, specifying the columns to be used as a base

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to put the retrieved rows into groups in the report, i.e. sort criteria. Fourth, specifying the conditions for each group to be finally included in the report (column 3, lines 14-24). Li also discloses that, the FROM clause can be formulated automatically by the user interface based on the referenced columns in the other clauses (column 3, lines 31-33), the FROM clause in the SELECT statement specifies the tables from which data are retrieved. In most cases, the tables can be determined automatically from the chosen columns (column 9, lines 52-55).

Related Prior Arts

The following list of prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Fenlon, Peter et al., US 20030093374 A1, "Internet-connected devices".
- Berno; Anthony J., US 6694321 B1, "System, method, and product for development and maintenance of database-related software applications".
- Madan; Harpinder S. et al., US 6748374 B1, "Method for generating a relational database query statement using one or more templates corresponding to search conditions in an expression tree".
- Anonsen; Steven P. et al., US 7162469 B2, "Querying an object for properties".

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shew-Fen Lin whose telephone number is 571-272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

August 28, 2007

Shew-Fen Lin
Patent Examiner
Art Unit 2166


HOSAIN ALAM
SUPERVISORY PATENT EXAMINER